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APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,131	12/17/2001		Dharapuram N. Srinath	3135-Z	4160
7590 03/29/2004				EXAMINER	
Jim Zegeer			KIM, CHRISTOPHER S		
Suite 108 801 North Pitt Street				ART UNIT	PAPER NUMBER
Alexandria, VA 22314				3752	• /
				DATE MAILED: 03/29/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		M
₹	Application No.	Applicant(s)
	10/016,131	SRINATH ET AL.
Office Action Summary	Examiner	Art Unit
	Christopher S. Kim	3752
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wit	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 Clafter SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory properties to reply within the set or extended period for reply will, by any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a recon. It is a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MONT statute, cause the application to become ABA	rply be timely filed (30) days will be considered timely. FHS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on	<u>29 January 2004</u> .	
2a) ☐ This action is FINAL . 2b) ☑	This action is non-final.	
3) Since this application is in condition for all	lowance except for formal matte	ers, prosecution as to the merits is
closed in accordance with the practice un	der Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.
Disposition of Claims		
4) ☐ Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) 5 and 8-10 is/are 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4,6 and 7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and are subject.	e withdrawn from consideration.	
Application Papers		
9) The specification is objected to by the Exact 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the county The oath or declaration is objected to by the	accepted or b) objected to be on the drawing(s) be held in abeyand orrection is required if the drawing(s)	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in Ap e priority documents have been ureau (PCT Rule 17.2(a)).	pplication No received in this National Stage
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) ☐ Interview S	ummary (PTO-413)
 1) Notice of References Cited (PTO-092) 2) Notice of Draftsperson's Patent Drawing Review (PTO-94 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 5. 	8) Paper No(s)/Mail Date formal Patent Application (PTO-152)

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Invention I, Species C in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the apparatus and method claims are parallel claims and search and consideration are essentially the same. This is not found persuasive because applicant's assertion is unsupported by evidence to refute the distinct patentability and different search and consideration identified in the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5 and 8-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention and Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The term "low" in claims 1, 2, 6 and 7 is a relative term which renders the claims indefinite. The term "low" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is uncertain what degree or range of momentum is defined by the recitation "low momentum".

The term "wide" in claim 2 is a relative term which renders the claim indefinite.

The term "wide" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is uncertain what degree or range of angle is defined by the recitation "wide angle".

The term "narrow" in claim 7 is a relative term which renders the claim indefinite.

The term "narrow" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is uncertain what degree or range of diameters is defined by the recitation "narrow range of diameters".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Babich et al. (4,205,786).

Babich discloses a fluidic spray system comprising a fluidic oscillator 2,3 coupled to a supply of liquid A and a vortex valve 1.

7. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Nekrasov et al. (3,614,961).

Nekrasov discloses a fluidic spray system comprising a fluidic oscillator 2,7 coupled to a supply of liquid A,B and a vortex valve 1.

8. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Raghu (6,253,782)

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Raghu discloses a fluidic spray system comprising a fluidic oscillator IC and a flow path reverser SFM.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (703) 308-8336. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ghristopher S. Kim-Primary Examiner Art Unit 3752 Page 5

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